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New England Intercollegiate Geological Conference: Southeastern New Hampshire, October 13, and 14, 1956: announcements, maps, and general information

New England Intercollegiate Geological Conference (NEIGC)

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Please respect any trip stops designated as “no hammers”, “no collecting” or the like.

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NEW ENGLAND INTERCOLLEGIATE GEOLOGICAL CONFERENCE

ANNUAL MEETING 1956

PRELIMINARY ANNOUNCEMENT

The 48th annual meeting of the New England Intercollegiate Geological Conference will be held in Southeastern New Hampshire on October 13 and 14. The Department of Geology of The University of New Hampshire will be host to the conference.

Registration - Friday, October 12, from 5 P.M. to 11 P.M. at the Chamber of Commerce Information Stand, located immediately in front of Howard Johnsons Restaurant on the traffic circle in Portsmouth, New Hampshire. This circle is the intersection of the Maine-New Hampshire turnpike, U.S. Rt. 4, and N.H. route 16, and a by-pass from U.S. Rt. 1.

A dinner has been arranged for those attending the conference. Time, 7:00 P.M., Saturday, October 13, at the Rockingham Hotel in Portsmouth, New Hampshire. The price will be \$2.50 and tickets may be purchased at the Registration Stand Friday night, or at the time and place of the dinner. You need not stay at the Rockingham to attend the dinner and meeting.

The annual business meeting of the conference will be held at the Rockingham Hotel at 8:00 P.M. following the dinner. The facilities of the hotel, including the bar, will be available to dinner guests both before and after the dinner and meeting.

A final announcement will be mailed the last week of September. This later mailing will provide you with a bibliography for the field trips, assembly points, and departure times, a road map of the Portsmouth-Durham region, and a post card so that we may learn of your intentions.

Saturday, October 13

Trip A - Geology of the Rye, Kittery and Eliot formations - Hampton-Portsmouth and Durham, New Hampshire.
Leader, Robert F. Novotny - Topo. sheets - 15' quadrangles - Exeter, Massachusetts and New Hampshire, York, Maine, and New Hampshire, and Dover, New Hampshire and Maine.

Trip B - Pleistocene Geology of the Durham-Dover area.
Leaders, Donald C. Chapman and Edward Bradley.
Topo. sheets - 15' quadrangles Exeter, Massachusetts and New Hampshire, York, Maine and New Hampshire and Dover, New Hampshire and Maine

Trip C - Isles of Shoals Geology. Leader, Katharine Fowler Billings (Mrs. M. P. Billings) Topo. sheet, 15' quadrangle York, Maine and New Hampshire. This trip will depend upon weather and interest - and will be limited to about 25 persons. It will cost about \$3.00.

Sunday, October 14

- Trip D - Geology of the Mt. Pawtuckaway area, Leader, Jacob Freedman, topo sheets, 15' Pawtuckaway, New Hampshire, Geol. map - Mt. Pawtuckaway quadrangle either Bulletin of G.S.A., vol. 61, pp. 449-492, 1950 or New Hampshire State Planning and Development Commission, 1950 map by Jacob Freedman.
- Trip E - Geology of the York-Cape Neddick, Maine area. Leader, John C. Naff. Topo. sheets, 15' quadrangle York, Maine - New Hampshire.
- Trip F - Pleistocene Geology south of Durham - Portsmouth. Leader Donald C. Chapman and Edward Bradley. Topo. sheets, 15' Dover, New Hampshire and Maine, Exeter, New Hampshire - Massachusetts.
- Trip G - Mineral collecting trip to Raymond, New Hampshire, pegmatites. Leader, Glenn W. Stewart. Topo. sheets, 15' Pawtuckaway, New Hampshire

Those planning to attend the meetings are urged to make reservations immediately. October 12-14 will be a busy weekend for tourists. There is practically no housing available in Durham. The enclosed map of the campus of the University of New Hampshire indicates the existence of and shows the location of various fraternity and sorority houses. Students affiliated with our fraternities must make their own arrangements with our local University of New Hampshire organizations for spending the night.

More formal living arrangements should be made at one of the hotels or motels located in the Portsmouth, New Hampshire, region. A list of some of the hotels and motels is given below:

Rockingham Hotel, Portsmouth, New Hampshire.

Rooms with bath from \$4.75 to 6.50	- single person
7.75 to 10.50	- double beds - 2 persons
8.25 to 11.00	- twin beds - 2 persons
Rooms with running water, public bath:	
2.75 to 3.75	- single person
4.75 to 6.25	- double beds - 2 persons

Wentworth-By-The-Sea, Newcastle, New Hampshire - $3\frac{1}{2}$ miles from Portsmouth
- with running water only - \$10.00 per person
3 or 4 persons, 2 rooms, twin beds - \$12 per person
2 persons, twin beds - \$15 per person.
2 persons, double room, bath - \$13-\$15 per person
All rates at the Wentworth include meals.

Meadowbrook Inn - Motel - Portsmouth, New Hampshire, at traffic circle.

All rooms with bath - single room	- \$8 per person
Room, double bed	10.00 - 2 persons
Room, twin beds	12.00 - 2 persons
Room, 2 double beds	14.00 - 3 persons
Room, 2 double beds	16.00 - 4 persons
Extra roll-away bed	- \$3.00

Port City Motel, Portsmouth, New Hampshire at traffic circle, on Rt. 1

All rooms with bath - single room	\$ 6.00 per person (by-pass.
twin bedroom	10.00 two persons
Room, double bed	8.00 two persons
Room, 2 double beds,	14.00 four persons.

The following motels are located south of Portsmouth, New Hampshire on Route 1. They are all clean with baths. Rates vary from about \$4 per person (single bed), and \$3 per person (double bed) to \$6 per person (single) and \$5 per person (double). The more in a room, the cheaper, and each motel has a few rooms equipped to hold 4, 5, or 6 persons.

Webbers Motel and Motor Court, 600 Lafayette Rd., Portsmouth, N.H.
1 mile South of Portsmouth on U.S. 1.

Sleepy Hollow Motel, Rt. 1, Rye, New Hampshire
5.5 miles South of Portsmouth on U.S. 1.

Towne Lyne Motel, Rt. 1, Rye, New Hampshire, RFD #1
5.6 miles South of Portsmouth on U.S. 1.

Dalton's Motel - Hampton Center, New Hampshire
10.5 miles South of Portsmouth on U.S. 1.

Kelly's Motel - Hampton Village, New Hampshire
11 miles South of Portsmouth on U.S. 1

Probably 30 more motels are present on this 10 mile stretch but have not been checked by the committee.

For those who wish to be near the ocean, Rt. 1A south of Portsmouth, New Hampshire is studded with cabins and motels, many of which close with cold weather. Two are listed below, at Wallis Sands, at the north end of a superb beach. They are heated, clean and reasonable and about 4 miles from Portsmouth on Rt. 1A:

Rosecliff Cabins, Wallis Sands Beach, Rye, New Hampshire
Richard F. Cady, Proprietor

Don's Motel Cabin Village, Wallis Sands Beach, Rye, New Hampshire

Rates at these two motels vary from about \$3.00 per person to about \$5.00 per person.

NEW ENGLAND INTERCOLLEGIATE GEOLOGICAL CONFERENCE

ANNUAL FALL MEETING 1956

FINAL ANNOUNCEMENT

Place Southeastern New Hampshire.

Dates Saturday, October 13, and Sunday, October 14.

Registration Friday evening, October 12, 5.00 to 11.00 P.M. at the Portsmouth, N. H. Chamber of Commerce Information Booth, located at the traffic circle at the intersection of the New Hampshire - Maine Turnpike with U.S. Route 4, N.H. Route 16, and a By-Pass of U.S. Route 1. The booth is located directly in front of a Howard Johnson's Restaurant, and visiting geologists are advised to drive into the H.J. parking lot to get safely away from the main flow of traffic. Trip information will also be available at the Assembly Points of Field Trips about one-half hour before field trips start.

Program Saturday morning and afternoon:
 Field Trips A, B, and C.

Saturday, 7:00 P.M.

Dinner at the Rockingham Hotel, in Portsmouth, N.H.

Price \$2.50 - tickets may be purchased Friday night when registering, or at the Hotel, just before dinner.

Saturday, 8:00 P.M. (After the dinner)

Annual Meeting in the Rockingham Hotel.

Sunday morning and early afternoon:

Field Trips D, E, F and G.

Topographic and Geologic Maps

The maps to be used on each field trip are indicated under the description of the trip. Additional copies will be made available at the start of each trip, but participants are urged to bring their own maps; our supply is limited. Publications by the New Hampshire State Planning and Development Commission on the Glacial Geology, the Bed Rock Geology and Mines and Minerals of New Hampshire will be available for purchase at the Registration booth.

Accommodations

A list of recommended Hotels and Motels was included with the Preliminary Announcement. Again we advise you to make early reservations, and further suggest that you pick up your reservation early, or make clear to your Motel keeper your intentions of arriving late. They tend to be "loose" about holding reservations for late and "unguaranteed" reservations. The sleeping situation will be tighter for late arrivals than it was last fall at the Ticonderoga meeting.

Advance Registration

Please fill in the enclosed post-card. It is important for us to have a reasonable count of geologists to be expected.

FIELD TRIPS

TRIP A -- PALEOZOIC TRIP

Leader: Robert F. Novotny

Time: 8:30 A. M., Saturday - Portsmouth; 9:00 A. M., Smithfield, N. H., traffic circle.

Assembly Point: Bus(es) will be used if possible - in any case, trip will leave from the parking lot, west side of road, just south of Seybolt's Garage, at intersection of Route 1 and Route 1 Bypass, Portsmouth, N. H. at 8:30 A.M. The group will proceed South on Route 1, about 15 miles to the Smithtown traffic circle and closed Howard-Johnson restaurant; intersection of U. S. Route 1 and N. H. Route 17. This will be a second assembly point (only 25 miles from Route 128, Lynnfield, Mass.) The trip will leave the Smithtown assembly point at 9:00 A.M. (See enclosed mimeographed map)

Lunch: Lunch stop where sandwiches, etc., may be purchased.

Remarks: Trip A will cover the Rye fm., a Paleozoic formation consisting of predominantly lower meta-sediments and upper meta-volcanics, the Kittery fm. and the Eliot fm - metasediments overlying the Rye fm.

References: Katz, F. J. (1917) Stratigraphy in Southwestern Maine and Southeastern New Hampshire, U. S. G. S. Prof. Paper 108, p. 165-177, and Billings, M. P. (1956) The Geology of New Hampshire, Part II, Bedrock Geology, N. H. State Planning and Development Commission. p. 38-41.

Topo Maps: 15 min. quadrangles Exeter, Mass. - N. H., York, N. H. - Me., and Dover, N. H. - Me.

TRIP B -- PLEISTOCENE TRIP

Leaders: Donald H. Chapman and Edward Bradley

Time: 8:45 A. M. Saturday.

Assembly Point: Bus(es) will be used, if possible - in any case trip will leave from the parking lot, west side of road, just south of Seybolt's Garage, at intersection of Route 1 and Route 1 Bypass, Portsmouth, N. H.

Lunch: A lunch stop will be made and a box lunch provided for this trip.

Remarks: Trip B will cover an area peripheral to Great Bay - included stops at varied Pleistocene deposits and openings in the region. In particular, the drumlin, and possible marine benching at Stratham Hill will be visited as well as the Epping clay deposits.

References: (readily available) Katz, F. J. and Keith, A. (1917) The Newington Moraine, Me, N. H., and Mass. U. S. G. S. Prof. Paper 108 B, 29pp; Goldthwait, J. W. (1925), The Geology of New Hampshire, The N. H. Acad. of Sci Handbook 1, 86pp; Goldthwait, J. W. (1938), the Uncovering of New Hampshire by the last ice sheet, Am. Jour. Sci, Ser. Vol. 36, pp. 345-372, and Goldthwait, J. W., Lawrence, and R. P., The Geology of New Hampshire Part I, Surficial Geology, N. H. State Planning and Development Commission, 83 pp.

Topo Maps: 15 min. quadrangles, Exeter, Mass. - N. H., Dover, Me. - N. H.

TRIP C -- ISLES OF SHOALS TRIP

Leader: Katharine Fowler Billings

Time: 8:00 A. M. Saturday.

Assembly Point: Mike's Lobster Pound, Route 1 B South shore of Sagamore Creek, Portsmouth, N. H.

Remarks: This trip will be made only if weather conditions are right and if enough interest is shown - costs will be about \$3 per person for the boat and 50¢ for a box lunch. Wear warm clothes, a wind and waterproof jacket at least. If the trip is cancelled, prospective islanders will have time to make either trip A or trip B. Please sign up for this trip Friday night at the registration booth. Space will be limited.

References: There is no good reference to the Geology of the Isles of Shoals (meta-sediments, granite and dikes).

Topo Map: 15 min. quadrangle, York, Me. - N. H.

TRIP D -- PAWTUCKAWAY AREA

Leader: Jacob Freedman.

Time: 8:30 A. M. Sunday.

Assembly Point: Parking lot, on U. S. Route 4, just north of Railroad tracks in Durham, N. H. (about 30 minute drive from Portsmouth, N. H.).

Remarks: Trip will be by private automobile and box lunches will be supplied upon request. This trip will be a continuation of Trip A, in that it will continue up the stratigraphic column from the Eliot fm. to the Berwick and Littleton fms., and will also include members of the New Hampshire magma series and an alkalic complex belonging to the White Mt. Magma Series.

References: Roy, C. J. and Freedman, J. (1944) Petrology of the Pawtuckaway Mountains, N. H., Bull. G. S. A., Vol. 55, pp. 905-920; Freedman, J., (1950) Stratigraphy and Structure of the Mt. Pawtuckaway Quadrangle, Southeastern New Hampshire, Bull. G. S. A., Vol. 61, pp. 449-492; Freedman, J. (1950) The Geology of the Mt. Pawtuckaway Quadrangle, New Hampshire, New Hampshire State Planning and Development Commission.

Topo Map: 15' quadrangle, Pawtuckaway, N. H.

TRIP E -- CAPE NEDDICK AREA - MAINE

Leader: John C. Haff

Time: 8:30 A. M.

Assembly Point: Parking lot in front of Stardust Inn, Route 1, Maine. Proceed from Portsmouth traffic circle north on turnpike (10¢ toll on bridge) 3.1 miles, go right on Route 1, .6 miles to Inn, or cross toll-free bridge from Portsmouth - Kittery, Me. - proceed about 2.7 miles on Route 1 from Portsmouth end of bridge to Stardust Inn.

Remarks: Kittery quartzite is intruded by a complex of multiple dikes, the Cape Neddick Gabbro and a riebeckite granite. Some of the contact areas will be visited, and if time permits, unusual shore line features will be seen.

References: Haff, J. C. (1939) Multiple Dikes of Cape Neddick, Bull. G. S. A., Vol. 50, pp. 465-514; Haff, J. C. (1941), Contaminated Complex Dike at Cape Neddick, Maine, Jour. Geol., Vol. XLIX, No. 8, pp. 835 - 853; Haff, J. C. (1943) Alkaline Vitrophyre Dike, Cape Neddick, Me. Am. Mineral 28, pp. 426-436.

Topo Map: 15' quadrangle York, Me. - N. H.

TRIP F -- PLEISTOCENE GEOLOGY, NORTH AND SOUTH OF PORTSMOUTH, N. H.

Leaders: Donald H. Chapman and Edward Bradley.

Time: 8:15 A. M. Sunday.

Assembly Point: Parking lot, west side of road, just south of Seybolts Garage at intersection of Route 1 and Route 1 Bypass, Portsmouth (same as Assembly point of Sat. trips A and B).

Remarks: This trip will visit points of interest north of Portsmouth, in Maine and then proceed south by Great Boars Head, New Hampshire.

References: Leavitt, H. W. and Perkins, E. H. (1935). A Survey of road materials and glacial geology of Maine, Glacial Geology of Maine vol. II, Maine Tech. Exp. Sta. Bull 30, 232 pp; Chute, N. E. and Nichols, R. E. (1941) The Geology of the coast of northeastern Massachusetts, Mass. Dept. of Public Works - U. S. Dept. of Int. Geol. Survey Coop. Geol. report Bull. No. 7, 48 pp.

Topo Maps: 15 min. quadrangles York Me. - N. H., Exeter, Mass. - N. H.

TRIP G -- MINERAL COLLECTING IN RAYMOND PEGMATITES

Leader: Glenn W. Stewart

Time: 8:30 A. M. Sunday

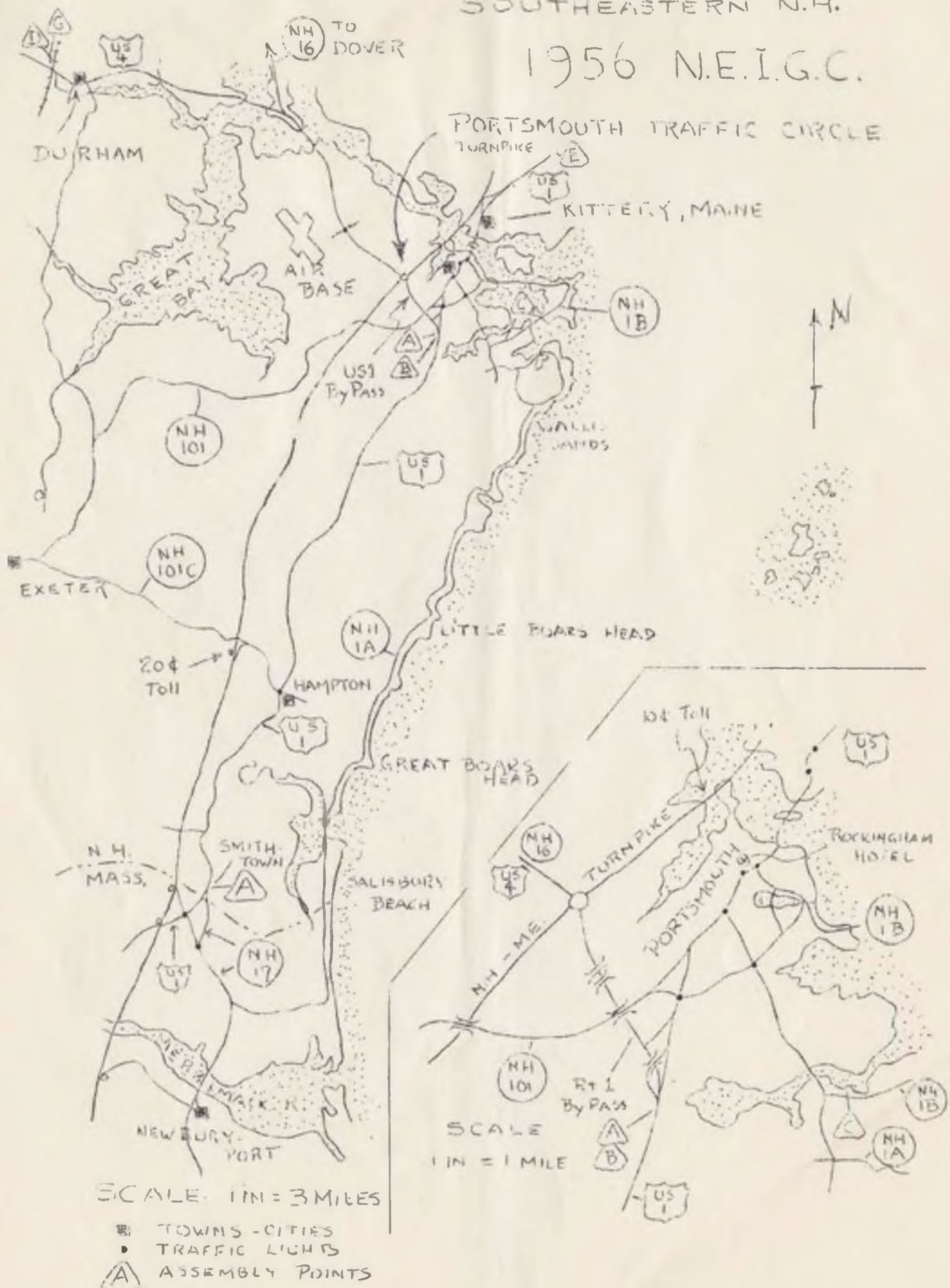
Assembly Point: Parking lot, on U. S. Route 4, just north of Railroad tracks in Durham, N. H. (about a 30 minute drive from Portsmouth, N. H.)

Remarks: This trip will visit some of the old pegmatite pits and dumps in Raymond township. Emphasis will be on mineral collecting rather than structure of pegmatite bodies.

Topo Map: 15 min. quadrangle, Pawtuckaway, N. H.

SOUTHEASTERN N.H.

1956 N.E.I.G.C.



NEIGC

FIELD TRIP LOGS

FALL 1956

SAT

OCT 13th

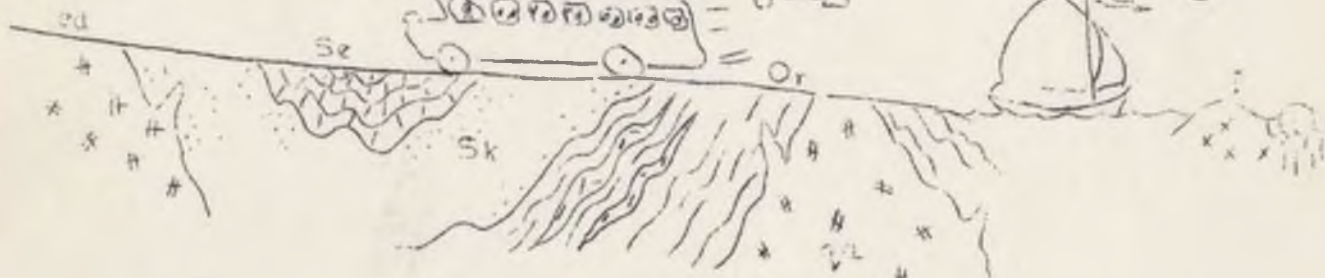


TRIP B

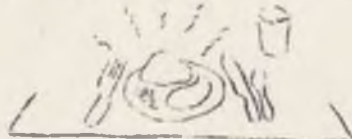
TRIP A



TRIP C



SAT 7:00 PM



SUN OCT 14th



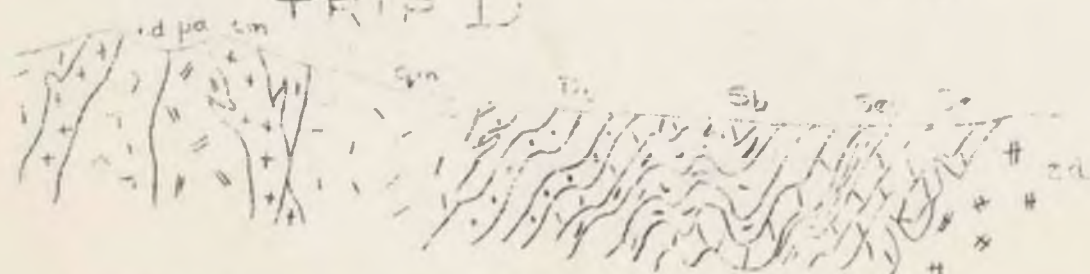
TRIP C

TRIP F

TRIP E



TRIP D



SOUTHEASTERN NEW HAMPSHIRE

48th Annual Meeting of the New England Intercollegiate Geological Conference

GENERAL INFORMATION:

TRIP C - Isles of Shoal Trip, Scheduled for Saturday, 8:00 A.M., will leave from Mike's Lobster Pound, Route 1B, on the south shore of Sagamore Creek. Route 1B leads onto Newcastle Island from its starting point on route 1A about .2 miles south of Sagamore Creek.

Mike's is located about .2 miles from the intersection of routes 1A and 1B. Wear warm and windproof, if not waterproof, clothes. A box lunch will be supplied each person making the trip (50 cents), and the trip itself will cost about \$3.00 per person. In the event of poor weather, or insufficient interest, there will be time for geologists to make either Trip A or Trip B. Please sign up for this trip Friday night at the registration booth.

TRIP G - Mineral Collecting in Raymond Pegmatites will leave from the parking lot, on U.S. Route 4, just north of the railroad tracks in Durham, N.H., at 8:30 A.M. on Sunday. You are requested to sign up for this trip with Glen W. Stewart, sometime on Saturday.

TRIPS A, B, D, E, AND F are covered more fully on the following pages.

Summary of Surficial Deposits of Southeastern New Hampshire

The unconsolidated deposits of the seacoast region of New Hampshire include glacial drift, marine or estuarine deposits of sand, silt and clay, fluvial or shore deposits that are probably postglacial but older than recent deposits, and recent alluvial, swamp and beach deposits.

The glacial drift includes till and glaciofluvial deposits. It is questionable whether or not the marine and estuarine deposits are late glacial or post-glacial. Till occurs both in drumlins and in ground moraine deposits; its lithologic characteristics range widely from place to place, but in general it is regarded as a sandy till. Geologists have referred to an "upper" and "lower" till, the former being generally yellow-brown to olive-drab in color and the latter gray-blue. It is probably true, however, that both the "upper" and "lower" tills were deposited from the same major ice advance and that the upper material is weathered and hence different in color.

Glaciofluvial deposits are widespread in the seacoast part of New Hampshire. Kame plains are large and abundant near the coast, whereas outwash plains appear to be more abundant several miles inland. The mode of origin of some of the large glaciofluvial deposits near the coast has been debated in the literature.

The marine and estuarine silt and clay deposits have two zones - an upper olive-drab to gray zone and a lower gray-blue zone. The upper is generally slightly coarser. Both are not always present. Questions regarding the relative age and exact origin of these deposits are unsettled. The question of the extent and effects of marine encroachment over the present land surface in late or postglacial time is also unsettled.